

REMARKS

Claims 2, 20 and 26 are canceled. Claims 1, 21-22, 25 and 27 are amended. New claims 32-35 are added. The new claims are supported by the originally-filed application by exemplary embodiments of the invention described at, for example, paragraph 0011 of page 3. Claims 1, 3-10, 17, 21-25 and 27-35 remain in the application. Reconsideration of the application in view of the amendments and the remarks to follow is requested.

Claims 1, 3-6, 17 and 20-31 stand rejected under 35 U.S.C. §102(b) as being anticipated by Komoriya et al. (5,025,284). Claims 2 and 7-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Komoriya et al.

Regarding the anticipation rejection against claim 1, claim 1 is amended exactly as presented to the Examiner during the interview of April 28, 2004. As amended, claim 1 recites at least one closed internal space comprising a plurality of openings for delivering a gas into the at the least one closed internal space. Support for the amendment language is provided by the originally-filed application by exemplary embodiments of the invention described at, for example, lines 10-12 of paragraph 0027 on page 7 which states: “[f]or this purpose, nozzles arranged in an appropriate distribution on the circumference can spray different gasses into the air space of the objective.” The Examiner agreed during the interview that this provided support for the amendment language. The Examiner also tentatively agreed that claim 1, as amended, is distinguishable over Komoriya.

Applicant respectfully requests allowance of independent claim 1 in the next office action.

Claims 3-10 and 17 depend from independent claim 1, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.

Regarding the anticipation rejection against claim 21, claim 21 is amended exactly as presented to the Examiner during the interview of April 28, 2004. As amended, claim 21 recites the chamber comprises different regions and wherein each region comprises a different refractive index. Support for the amendment language is provided by the originally-filed application by exemplary embodiments of the invention described at, for example, paragraph 0027, which states:

For this purpose, nozzles arranged in an appropriate distribution on the circumference can spray different gasses into the air space of the objective. Depending on the gasses introduced, this results, in a fashion distributed over the circumference, in different refractive indices of the gasses in accordance with different local refraction regions in the air or gas space. These locally differing refraction regions are a function in this case of the position and direction of inflow of the gasses. Thus, for example, there are produced in the vicinity of the nozzle area of a specific gas regions which correspond to the refractive index of the inflowing gas, while in another regions corresponding mixtures with a further gas or else with a plurality of other gasses are present, resulting correspondingly in other refractive index in this region.

(emphasis added). The recitation above from paragraph 0027 clearly supports the amendment language of claim 21. The Examiner tentatively agreed that claim 21, as amended, is distinguishable over Komoriya. Applicant respectfully requests allowance of independent claim 21 in the next office action.

Regarding the anticipation rejection against claim 22, claim 22 is amended exactly as presented to the Examiner during the interview of April 28, 2004, with the addition of “mixing” presented before “gradient” in the last line. As amended, claim 22 recites the chamber comprises a mixing gradient of gases. Support for the amendment language is provided by the originally-filed application by exemplary embodiments of the invention described at, for example, paragraphs 0028-0029, wherein paragraph 0028 sets up a precondition:

A precondition for this is, of course, that during operation a stationary or at least quasi-stationary operation is set up, or that correspondingly reproducible regions are produced in the gas space with a constant gas composition so that reproducible ratios are produced with reference to the correction of imaging characteristics. This means that it must be possible to represent specific, stable mixing gradients of the gasses in the closed gas space.

(emphasis added). Paragraph 0029 provides an exemplary design for carrying out the above stated precondition:

This means in design terms that the inlet openings 5a and outlet opening 5b illustrated in figure 1 are to be arranged distributed correspondingly over their circumference of the objective 1, and that locally

differing gasses are to be introduced via the inlet openings.

Consequently, paragraphs 0028-0029 clearly support the amendment language of claim 22. The Examiner tentatively agreed that claim 22, as amended, is distinguishable over Komoriya. Applicant respectfully requests allowance of independent claim 22 in the next office action.

Claims 23-24 depend from independent claim 22, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.

Regarding the anticipation rejection against claim 25, claim 25 is amended exactly as presented to the Examiner during the interview of April 28, 2004. As amended, claim 25 recites providing a plurality of openings in the objective to the chamber, and wherein one inert gas is provided in one opening and a different inert gas is provided in a different opening. Support for the amendment language is provided by the originally-filed application by exemplary embodiments of the invention described at, for example, paragraph 0027-0029 presented above. The Examiner tentatively agreed that claim 25, as amended, is distinguishable over Komoriya. Komoriya teaches to mix gases before providing the gases to the objective, and therefore, could not teach or suggest the

positively recited limitation of claim 25. Applicant respectfully requests allowance of independent claim 25 in the next office action.

Regarding the anticipation rejection against claim 27, claim 27 is amended exactly as presented to the Examiner during the interview of April 28, 2004. As amended, claim 27 recites the objective having a set of optical characteristics comprising at least a first refractive index, changing the first refractive index to a second refractive index, and adjusting the refractive index of the objective to the first refractive index. Support for the amendment language is provided by the originally-filed application by exemplary embodiments of the invention described at, for example, paragraph 0027. The Examiner tentatively agreed that claim 27, as amended, is distinguishable over Komoriya. Applicant respectfully requests allowance of independent claim 27 in the next office action.

Regarding the anticipation rejection against claim 28, during the interview, Applicant's representative respectfully pointed out that the claim as written is distinguishable over Komoriya. Claim 28 recites **cleaning the objective** by flushing a first gas through the chamber. Komoriya provides no teaching to cleaning an objective. Consequently, it is inconceivable that Komoriya teaches or suggests cleaning the objective by flushing a first gas through the chamber as positively recited by claim 28. For this reason, claim 28 is allowable and Applicant respectfully requests allowance of independent claim 28 in the next office action.

Claims 29-31 depend from independent claim 28, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.

New independent claims 32 and 34 recite forming an objective by mounting at least two lenses in the objective to form a chamber within the objective, and during the forming, providing air in the chamber. Komoriya is completely devoid of teachings to providing air in a chamber of an objective. For at least this reason, claims 32 and 34 are allowable. Furthermore, Komoriya does not teach or suggest forming an objective, and therefore, it is inconceivable that Komoriya teaches or suggests during the forming, providing air in the chamber as positively recited in claims 32 and 34. For this additional reason, claims 32 and 34 are allowable over Komoriya.

Respective dependent claims 33 and 35 are allowable for depending from respective allowable independent claims.

This application is now believed to be in immediate condition for allowance, and action to that end is respectfully requested. If the Examiner's next anticipated action is to be anything other than a Notice of Allowance, the undersigned respectfully requests a telephone interview prior to issuance of any such subsequent action.

Respectfully submitted,

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By: 
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